

SYSTEM REPORT: MRI PHILIPS ACHIEVA 3T



Project No. (Item)	004838
	QA
Inspection done by & Date	Andris Lukins, Arbor Medical Korporācija the 15 & 16. 03.2024
SYSTEM INFORMATION	
Manufacturer and model	Philips Achieva dSream
Upgraded System? • From which one? • Year of the upgrade?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2.6.3 to 3.2 (2012) to S,W 5.7, dSteam(2020)
System model no.	781270
System serial no.	34037
System YOM	2009 / upgraded 2020
Gradient type	787
Number of Channels	Digital
MAGNET INFORMATION	
Magnet YOM	2009
Magnet type (OR?, F2000, LCC..)	REX (Rex, no IV)
Magnet model no.	UF_300_0460 (50000-55)
Magnet serial no.	727802
MAGNET INFORMATION	
Current helium level	72.8% (as of 17.03.2024)
Estimated Boil off/day when compressor is off	28-DEC-2023 73.09% 17-MAR-2024 72.8%
Magnet pressure	36 hPa
COOLING SYSTEM INFORMATION	
Compressor model no.	F-50HC
Compressor YOM	Rebuild 2019 (see label)
Compressor running hours	694157
Compressor pressure level	2.25 MPa
Last adsorber replacement or maintenance	23.03.2023
Cold-head model no.	RDK-408C2
Last cold-head replacement or maintenance	08.03.2023
PATIENT TABLE INFORMATION	
Table model no.	989603030322
Table serial no.	626
WORKSTATION INFORMATION (Main-Host)	
Workstation model no.	Z4G4
Workstation serial no.	CZC0077JL9
Workstation software version	5.7.1.2 (Windows 10)
Workstation software options	See file
WORKSTATIONS ADDITIONNAL (Recon)	
Workstation (1) model no.	Z4G4
Workstation (1) serial no.	CZC0079W8Y

ACCESSORIES, MANUAL HARD-COPIES AND SOFTWARE DISCS	
Software	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Manuals	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>
CEE Certificate	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Any additional items/accessories?	1. Cart for coils. 2. Patient monitor (fMRI) 3. Pat. obsr. camera
MAINTENANCE	
Any major part replacements?	1. Circulator 2018 2. Compresor 2019 3. Coldhead
Is system logbook present?	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>
COMMENTS	
Functional condition	1. Spike test Body coil (std.) detects noise – that can be interna/external origin – can influence test results. Environmental. 2. Analysing LOG – system performance is without big issues. 3. Performance of coldhead – good. PMS suggested S/w must be 5.7.1.4
Cosmetic condition	1. Crack in internal cone (bore, body coil?) Except above - system without visual defects

PHANTOMS		
Model name	Model no.	Serial no.
Phantom bottles (16pc)	459800069371	
3.0T 32 CH HeadCoil Phantom Assembly	453530310561	
Knee Coil Phantom	453530255681	
Phantom bottle 3000 cc 3T	459800051601	
Body phantom 3T	459800043971	
Phantom bottle 250cc	452213195702	
Phantom bottle 1000cc	459800046821	
Phantom bottle 2000cc	459800051621	
Phantom bottle 3000cc	459800051601	
Sphere A	452213139264	

COILS LIST And QA TESTING				
			Result of Test	
	Coil name & Nbr of channels <i>(Write what is written on the labels)</i>	Model no.	Serial no.	QA
1	dS SMALL_EXTREMITY 16ch 3.0T	459801295511	221	PASS
2	dS SHOULDER 16ch 3.0T	459801312411	279	PASS
3	dS HEAD 32H 3.0T	453530330541	144	FAIL

4	dS T/R KNEE 16ch 3.0T	459801290682	1363	PASS
5	dS HEAD_NECK 3.0T	459801290122	1516	PASS
6	dS Base	459801290091	854	PASS
7	NVC Head	459801290102	01088	PASS
8	dS ANTERIOR 3.0T	459801290183	2196	PASS
9	dS FOOTANKLE 16ch 3.0T	459801295501	238	PASS
10	dStream interface 3.0T	989603019018	158057507002	PASS
11	Body coil (S,C,T)			PASS
12	Head TR	452213219834	220	No phantom
13	Flex S_1	453530322433	3294	PASS
14	Flex S_2	453530322433	3293	PASS
15				
16				

SYSTEM QA TESTING		
	Tests Names Performed	Result of the Tests
		QA
1	System selftest	PASS
2	SCC-RECON simulation test	PASS
3	PFEI peripheral test	PASS
4	PATSUP selftest	PASS
5	HOST-RMMU_MEU communication test	PASS
6	HOST - RECON simulation test	PASS
7	dStream selftest	PASS
8	Coil noise test Head TR	NOISE
9	Coil noise test Head 32	NOISE
10	Magnet info overview	PASS
11	Check status DPS and pressure sensor	PASS
12	Circulator TX1 general test	PASS
13	Circulator TX2 general test	PASS
14	Coil noise test BODY	PASS
15	Generate a diagnostic graddump	PASS
16	Gradient load test Master	PASS
17	Gradient load test Parallel	PASS
18	Gradient load test Slave	PASS
19	HOS-PS 5A channel test	PASS
20	HOST-RMMU_MEU communication test	PASS
21	iGCI amplifier mode	PASS
22	LCC Board test	PASS
23	LCC Info overview test	PASS
24	MultiTransmit cable diagnostic	PASS
25	MultiTransmit RF verification (incl.: Gradient FID shimming linear mode)	PASS
26	PATCOM selftest	PASS

27	Position accuracy test	PASS
28	PSU2 selftest	PASS
29	RF TX1 stability test	PASS
30	RF TX2 stability test	PASS
31	SBM board test	PASS
32	RF-AMP TX1 general test	PASS
33	RF-AMP TX1 info overview	PASS
34	RF-AMP TX2 general test	PASS
35	RF-AMP TX2 info overview	PASS
36	SCU selftest	PASS
37	Spike test Body coil (std.)	NOISE
38	Wireless BTU test	PASS
39	PIQT	PASS